

06-198

Original

RECEIVED

SEP - 8 2006

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

Federal Communications Commission  
Office of Secretary

In the Matter of )  
 )  
Petition of Sumitomo Canada Limited ) ET \_\_\_\_\_  
 )  
For Temporary Waiver of Section 15.117 )  
of the Commission's Rules )

To: Deputy Chief, Office of Engineering and Technology

**PETITION FOR WAIVER**

Sumitomo Canada Limited ("Sumitomo"), by its attorneys and pursuant to Section 1.3 of the Commission's rules, respectfully requests a temporary, one year waiver of Section 15.117 of the Commission's rules mandating inclusion of a DTV tuner in all receivers by March 1, 2007.<sup>1</sup> A temporary waiver of the DTV tuner mandate for Sumitomo's specialized video system, which is specially designed for – and sold only to – healthcare facilities, is in the public interest because it would facilitate the DTV transition for this niche market and also place Sumitomo in the same position as another manufacturer in the healthcare market.

This waiver request is identical to the waiver recently granted by the Commission in the *PDI Order*.<sup>2</sup> The Commission stated there that in the "case of receivers used as part of a system intended for use in health care facilities," a one-year extension of the DTV tuner deadline would "serve the public interest without otherwise compromising our goals for ensuring that

<sup>1</sup> 47 C.F.R. §§ 1.3 and § 15.117.

<sup>2</sup> *Requirements for Digital Television Receiving Capability*, Order, ET Dkt. No. 05-24, FCC 06-123, 2006 WL 2381775 (rel. Aug. 17, 2006) ("*PDI Order*").

consumers are able to view broadcasters' digital television signals.”<sup>3</sup> The circumstances facing Sumitomo are the same circumstances facing PDI and justify grant of this temporary waiver.

## **I. BACKGROUND**

The Commission's rules require all new broadcast television receivers with screen sizes less than 13" to have a DTV tuner by March 1, 2007.<sup>4</sup> Section 15.117(i) of the Commission's rules provides:

*Digital television reception capability implementation schedule.*

(1) Responsible parties, as defined in §2.909 of this chapter, are required to equip new TV broadcast receivers that are shipped in interstate commerce or imported from any foreign country into the United States and for which they are responsible to comply with the provisions of this section in accordance with the following schedule:

\* \* \*

(iii) Receivers with screen sizes less than 25"—100% of all such units must include DTV tuners effective March 1, 2007.

Sumitomo manufactures and distributes television systems designed specifically for the healthcare market, and has been in that business for over 20 years. Sumitomo manufactures its systems by assembling components designed and supplied by third parties.<sup>5</sup> There are only two companies in the United States that sell arm-mounted televisions designed and approved specifically for the healthcare industry: Sumitomo and PDI Communications Systems, Inc. ("PDI"). Both PDI and Sumitomo use the same component suppliers.<sup>6</sup>

---

<sup>3</sup> *Id.* at ¶ 10.

<sup>4</sup> *Requirements for Digital Television Receiving Capability*, Second Report and Order, ET Dkt. No. 05-24, FCC 05-190, 20 FCC Rcd 18,607 (2005) ("*Second Report and Order*").

<sup>5</sup> Declaration of Robert Ableman at ¶ 4.

<sup>6</sup> *Id.* at ¶ 7.

Sumitomo's K-10 and L-10 televisions, described in greater detail in Exhibit 1, are functionally identical to PDI's P9 and P10 models, providing the same applications and serving the same healthcare market.<sup>7</sup> Like the PDI systems, the Sumitomo viewing units are designed to be attached to articulated mechanical arms which are in turn attached to a larger system that provides multiplexed video and power.

The specialized viewing units, which have screen sizes under 13", are designed to account for the risk of electrical shocks to patients undergoing intravenous therapies (such as dialysis).<sup>8</sup> In accordance with safety guidelines issued by Underwriters Laboratories, the units are connected to a central system by a coaxial cable that provides both the power and the programming.<sup>9</sup> This specialized design reduces the risk of electrical shocks to patients undergoing intravenous therapies because the viewing units operate on low voltage, alternating- or direct-current power (the television automatically switches depending on the hospital's central power supply).

The monitors display only the signals that are sent through the coaxial cable from the central unit. The healthcare facilities may select cable, satellite, or broadcast programming as the source of video to the central unit.<sup>10</sup> The majority of Sumitomo's customers use cable or satellite as the source of video programming, although as noted the central unit can receive an over-the-air signal and transmit it to the viewing units.<sup>11</sup> Sumitomo's systems may also be used

---

<sup>7</sup> *Id.* at ¶ 8.

<sup>8</sup> More details for the monitor models, L-10 ELF and K10-300, are provided in Exhibit 1. (The K10-300 replaces the K10-200, and is identical except for the CRT model.)

<sup>9</sup> Declaration of Robert Ableman at ¶ 5 and Exhibit 1.

<sup>10</sup> Declaration of Robert Ableman at ¶ 6.

<sup>11</sup> *Id.* at ¶ 6.

to provide patient information and communications, for which the video source is also the central unit. It is impossible to use off-the-shelf consumer receivers in connection with these systems.<sup>12</sup>

## **II. A TWELVE-MONTH EXTENSION WOULD BE IN THE PUBLIC INTEREST.**

Sumitomo is a “responsible party,” under Section 15.117, and thus needs to comply with the DTV tuner mandate absent Commission waiver. As the Commission has repeatedly recognized, a “rule may be waived where the particular facts make strict compliance inconsistent with the public interest. In addition, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.”<sup>13</sup> Applying the March 1, 2007 deadline to Sumitomo would impede the ability of Sumitomo to deliver these specialized video units to the healthcare industry, and that would affect the quality of the healthcare experience for many patients.<sup>14</sup> Moreover, that deadline would place Sumitomo at a competitive disadvantage with its primary competitor. For these reasons, a 12-month extension of the DTV tuner mandate is warranted.

### **A. Strict Application of the March 1, 2007 Deadline Would Impose Substantial Burdens Without Providing Any Offsetting Benefits.**

As noted above, Sumitomo does not sell the monitors to consumers. Sumitomo’s customers for these specialized systems include hospitals, dialysis clinics, and nursing homes.<sup>15</sup> As a consequence of the limited, niche market for these systems, the companies that design and

---

<sup>12</sup> *Id.* at ¶ 6.

<sup>13</sup> *Request for Waiver of the Decision of the Universal Service Administrator by Douglas-Omaha Tech. Comm’n, Omaha, Nebraska*, Order, File No. SLD 427054, DA 06-1658, 2006 WL 2403967 (rel. Aug. 18, 2006), at ¶ 5 (concluding that “waiver is appropriate if special circumstances warrant a deviation from the general rule, and such deviation would better serve the public interest than strict adherence to the general rule”); *see also WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

<sup>14</sup> *See PDI Order* at ¶ 10.

<sup>15</sup> Declaration of Robert Ableman at ¶ 3.

manufacture the necessary component equipment understandably have given first priority to television manufacturers that sell mainstream products in larger markets.<sup>16</sup> Sumitomo has already initiated discussions with its suppliers for the development of the necessary components in connection with the Commission's DTV tuner mandate. Sumitomo anticipates that the process of bringing its systems into compliance with the requirement of Section 15.117 will take about 12-18 months, which is 6-12 months past the currently applicable deadline.<sup>17</sup>

A 12-month waiver is in the public interest in these circumstances because strict application of the March 1, 2007 deadline would impose substantial burdens on the public and on Sumitomo without providing any offsetting benefits. Without a waiver, Sumitomo will not be in a position to supply any new or replacement units to hospitals or clinics after March 1, 2007.<sup>18</sup> The healthcare facilities and the patients that rely on this type of system will be harmed.<sup>19</sup>

A short-term waiver would permit Sumitomo to supply replacement units as it concludes the process of working with its suppliers to design and manufacture the necessary equipment in accordance with applicable safety standards. Such a waiver would not defeat the purpose of the rule: the Commission, in applying the DTV tuner requirement to receivers with screen sizes less than 13", observed that "the portable and typically battery-powered products in this category are more likely to be used to receive off-the-air signals and to not have inputs for

---

<sup>16</sup> Declaration of Robert Ableman at ¶ 7; *see also PDI Order* at ¶ 10 (recognizing delays due to safety concerns and position as smaller manufacturer).

<sup>17</sup> Declaration of Robert Ableman at ¶ 7.

<sup>18</sup> *Id.*

<sup>19</sup> The Commission is particularly flexible where medical and health issues are implicated. *See, e.g., Dexcom, Inc., Request for Waiver of the Frequency Monitoring Requirements for the Medical Implant Communications Service Rules*, ET Dkt. No. 05-213, FCC 06-1, 2006 WL 141480 (rel. Jan. 18, 2006), at ¶¶ 14 *et seq.* (granting limited-duration waiver of frequency agility and listen-before-talk rules for company selling blood glucose monitoring system).

connection to a separate DTV receiver.”<sup>20</sup> Relying on this judgment, the Commission concluded that “sets with screen sizes less than 13” would generally not be useful to consumers once analog television service ceases.”<sup>21</sup> This is not a significant concern here. As noted above, Sumitomo’s viewing units receive their programming from the central unit in the system, usually set to provide cable or satellite programming. Nor are the viewing units portable or battery powered. They are designed for use solely via attachment to an articulated mechanical arm that in turn connects to the central and exclusive source of programming and power.

**B. A Waiver Would Be Consistent With Commission Precedent.**

As noted above, the Commission has granted a one year extension of the DTV tuner deadline to the other manufacturer and distributor of this type of specialty equipment, PDI.<sup>22</sup> The Commission found that the temporary waiver would serve the public interest without “compromising our goals for ensuring that consumers are able to view broadcasters’ digital television signals.”<sup>23</sup>

The development of a television capable of meeting the unique needs of healthcare facilities and patients while also incorporating a digital tuner, plus the costs of the tuner itself, will significantly increase the costs of this type of monitor. The Commission has already recognized the difficulties of meeting the safety requirements for equipment used in medical facilities and the fact that this type of market has not been a principal concern of

---

<sup>20</sup> *Second Report and Order* at ¶ 25.

<sup>21</sup> *Id.*

<sup>22</sup> *PDI Order*.

<sup>23</sup> *Id.* at ¶ 10.

suppliers.<sup>24</sup> PDI would have an unfair competitive advantage if it had an extension of the March 1, 2007 deadline but Sumitomo had to overcome, one year earlier, the Commission-recognized challenges of meeting the DTV tuner requirement for this type of system.

\* \* \*

Sumitomo is dedicated to providing hospitals, clinics, and patients with television equipment that can satisfy their unique needs in a safe and cost-effective manner. Sumitomo has begun the process of furnishing its systems with digital tuners, but it anticipates that this process will not conclude by March 1, 2007. Sumitomo therefore requests a 12-month extension of the deadline for coming into compliance with the DTV tuner requirement, and submits that such a waiver is in the public interest.

Respectfully submitted,



Gerard Waldron  
Eve Pogoriler  
Covington & Burling LLP  
1201 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
(202) 662-6000

*Counsel to Sumitomo Canada Limited*

September 8, 2006

---

<sup>24</sup> *Id.* at ¶ 10.

## **DECLARATION OF ROBERT ABLEMAN**

I, Robert Ableman, depose and state as follows:

1. I am Sales Manager of Sumitomo Canada Limited ("Sumitomo"). In this capacity I am responsible for the marketing of K10 and L-10 ELF models in North America. I have been associated with the hospital television and communications business for over 25 years.
2. The attached exhibit is a true and correct copy of the brochures and instructions for the K10 and L-10 ELF models described herein. The exhibit explains safe and proper use of the models and notes that their design is in accordance with safety guidelines issued by Underwriters Laboratories.
3. Sumitomo sells approximately eight to ten thousand of these viewing units to customers including hospitals, dialysis clinics, and nursing homes annually. There is no consumer market for these products, which are specially designed for use in the healthcare industry.
4. Sumitomo manufactures these systems by assembling components designed and supplied by third parties. The viewing units are supplied by a company in South Korea, which manufactures them to Sumitomo's specifications.
5. The specialized viewing units are connected to a central system by a coaxial cable that provides both the power and the programming. This design accounts for the risk of electrical shocks to patients undergoing intravenous therapies. Off-the-shelf consumer receivers cannot be used in for these systems. The viewing units are neither portable nor battery powered.
6. The central unit in the system provides the programming, typically cable or satellite but with the possibility of receiving over-the-air signals and transmitting them to the viewing units. The viewing units can also be used to display medical information.



7. Sumitomo uses the same suppliers as PDI Communications Systems, Inc. ("PDI"), the other manufacturer of this type of system. These suppliers have given first priority to mainstream products with large markets. They are now developing the necessary digital technology, which should be available in 12-18 months. Like PDI, however, Sumitomo will not be in a position to supply new or replacement units to hospitals or clinics after March 1, 2007 without a waiver.

8. Sumitomo competes with PDI in the niche market for these systems. In fact, Sumitomo's K10 and L-10 televisions are functionally identical to PDI's P9 and P10 models. Moreover, PDI's P9 models are supplied by the same manufacturer as the one for Sumitomo's K10 models. Sumitomo would be substantially harmed if the waiver granted to PDI were to be denied to Sumitomo.

9. I have reviewed the foregoing, and I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Robert Ableman (EP)  
Robert Ableman

September 8, 2006

## CERTIFICATE OF SERVICE

I, Eve Pogoriler, an attorney at the law firm of Covington & Burling, do hereby certify that on this 8th day of September, 2006, I caused a copy of the foregoing "Petition for Waiver" to be sent via electronic mail to the following:

Julius Knapp  
Deputy Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554  
Julius.Knapp@fcc.gov

Michael Lance  
Deputy Division Chief  
Engineering Division  
Media Bureau  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554  
Michael.Lance@fcc.gov

Alan Stillwell  
Senior Associate Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554  
Alan.Stillwell@fcc.gov

Heather Dixon  
Legal Advisor to Chairman Martin  
Federal Communications Commission  
445 12th Street, S.W., Room: 8-B201  
Washington, D.C. 20554  
Heather.Dixon@fcc.gov

Eloise Gore  
Assistant Division Chief  
Video Division  
Media Bureau  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554  
Eloise.Gore@fcc.gov

Jessica Rosenworcel  
Senior Legal Advisor to  
Commissioner Michael J. Copps  
Federal Communications Commission  
445 12th Street, S.W. Room: 8-B115  
Washington, D.C. 20554  
Jessica.Rosenworcel@fcc.gov

Donna Gregg  
Chief  
Video Division  
Media Bureau  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554  
Donna.Gregg@fcc.gov

Chris Robbins  
Acting Legal Advisor to  
Commissioner Deborah Taylor Tate  
Federal Communications Commission  
445 12th Street, S.W., Room: 8-A204  
Washington, D.C. 20554  
Chris.Robbins@fcc.gov

Cristina Chou Pauzé  
Legal Advisor to  
Commissioner Robert M. McDowell  
Federal Communications Commission  
445 12th Street, S.W. Room: 8-C302  
Washington, D.C. 20554  
Cristina.Pauze@fcc.gov

Randy Brioché  
Legal Advisor to  
Commissioner Jonathan S. Adelstein  
Federal Communications Commission  
445 12th Street, S.W. Room: 8-A302  
Washington, D.C. 20554  
Randy.Brioche@fcc.gov

  
Eve Pogoriler

## Exhibit 1

# ELF 10.4 LCD Healthcare Television



The ELF is a next generation hospital television using the latest LCD technology. Designed specifically for healthcare applications the ELF provides many unique features not found in consumer televisions.

## **PATIENT SAFETY**

- Fully Isolated, Safe, Low Voltage AC/DC Power Supply
- Spill-Proof Cabinet Design with Liquid Seal
- Concealed Cables and Connectors
- Hygienic Membrane/Micro-Switch Control Panel
- UL Approved for Hospital Use

## **PATIENT CONVENIENCE**

- Built-In Closed Captioning
- Oversized Easy-to-Read Controls
- 10.4" Screen for Optimum Viewing
- Front Facing Stereo Speakers
- Arm Mounted for Comfortable Positioning
- 800 x 600 Screen Resolution Ideal for Internet Applications and E-Mailing
- Self-Rent Feature

Each of the ELF's six Service Levels or tiers can be individually programmed with features such as speaker ON/OFF and Marquee or promotional channels that can display important hospital information every time the ELF is turned on. Excellent sound quality is achieved through the two front facing stereo speakers, or through a headset or earphone for private listening. Maximum volume limit can be programmed. Because each ELF has a built-in computer interface, it can be used for regular television viewing or as an interactive display terminal. Equipped with an optional computer module the ELF can deliver a variety of interactive applications such as Gift Shop Purchasing, Dietary Selection, On-Demand Video and Surveys or Questionnaires that can be directed to a specific television or department. The ELF's superior screen resolution allows patients or staff members to access the Internet in much the same way as on their home computer. The ELF is compatible with all existing power supplies and television support arms in today's hospitals.

---

**Model:** L-10 ELF

**Dimensions:** 13.5" W x 9.5" H x 3.5" D

**Weight:** 7.7 lbs.

**Screen Size:** 10.4"

**Channel Capacity:** 125 CATV Channels plus all UHF channels

**Audio:** Front mounted 1.5W stereo speakers, Mono and SAP modes also available

**Input Voltage:** AC 25-35V 60HZ, DC 18-32V

**Power Consumption:** 33W (Avg)

**Computer Interface:** Internal Interface to provide computer control

**VGA and Video Inputs:** Provides 800 x 600 screen resolution. Video input allows the connection of VCR or DVD players

**Service Levels:** Six individually programmable Service Levels or tiers including, Locked, Free TV,

**Service Levels:** Rented Unpaid, Rented paid, Premium 1 and Premium 2

**Self Rent:** Three Self-Rent options including built-in rental and confirmation screens

**Screen Protector:** High impact, scratch resistant acrylic

**Control Panel:** Hygienic, easy to clean membrane over light touch micro switches

**Closed Captioning:** Closed Captioning and Text modes

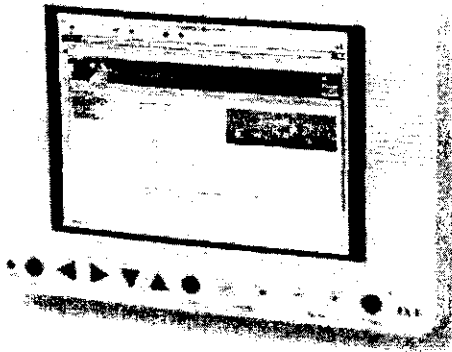
**Set-up Menus:** In English, Spanish and French

**Regulatory Compliance:** Fully UL approved for hospital use in USA and Canada

**Options:** IR Patient Remote Control, Set-up Programmer, Clone Programmer and Computer Module.

**"V" Chip Function:**

**Warranty:** See Dealer for Details



*Manufactured exclusively for:*

**Sumitomo Canada Ltd.**

*The L-10 ELF was developed by Sumitomo and is manufactured by KTV, the company that also manufactures the K10-200 patient television. Over the years, the K10-200 has been widely accepted by patients and hospitals. It has established an excellent reputation for safety, reliability and ease of use. The L-10 ELF has these same attributes in an elegant, state-of-the-art package.*

AVAILABLE FROM:

# K10-200

## Patient Television



The K10-200 is a 9" color television designed specifically to be used by patients in hospital. Safety and convenience features include:

### **PATIENT SAFETY**

- Fully isolated, safe, low voltage AC/DC power supply
- Spill-proof cabinet design with liquid seal
- Concealed power cables and connectors
- Hygienic front panel membrane switch
- Approved for hospital use

### **PATIENT CONVENIENCE**

- Built-in Closed Captioning
- All push button controls are oversize, front mounted, and easy to read
- 9" screen provides optimum viewing for patients with poor vision or reading glasses
- Self-rent feature allows patients to rent television services 24 hours a day with no staff involvement
- Suspension arm mount allows patients to position television for maximum viewing comfort

The K10-200's fully isolated AC/DC power supply provides the ultimate protection against shock or burn hazard. The six Service Levels, or tiers, built into each K10-200 can be individually programmed with many unique convenience features, including, speaker ON/OFF, marquee channels, three self rent options, volume limit, etc. Because every K10-200 is equipped with a built-in computer interface it can be used either as a basic television or interactive terminal. Adding an optional computer module makes it possible to deliver interactive applications such as on-demand video, surveys, and questionnaires.

---

<b>Dimensions:</b>	13" L x 11" W x 11"H
<b>Screen Size:</b>	9"
<b>Weight:</b>	15 lbs
<b>Cabinet:</b>	High impact plastic. Neutral finish resistant to cleaning solutions and disinfectants — spill resistant cabinet vents    molded handle for easy positioning
<b>Tuning System:</b>	Microprocessor controlled digital tuning
<b>Power Consumption:</b>	35 W
<b>Input Voltage:</b>	AC 25V-35V 60Hz 35W, DC 18V-32V 35W.
<b>Channel Capacity:</b>	125 CATV channels plus all VHF and UHF channels
<b>Audio:</b>	ON/OFF control in each Service Level or tier.
<b>Control Panel:</b>	Dedicated buttons for TV and interactive functions, Closed Captioning, Self Rent and Confirmation of Rental
<b>Service Levels:</b>	6 individually programmable Service Levels including "Locked, Free TV, Rented Unpaid, Rented Paid, Premium Service Level I and Premium Service Level II".
<b>Selectable Self Rent Configuration:</b>	Three Self Rent options including built-in rental and confirmation screen.
<b>LED Status Indicators:</b>	3 rear mounted LED's indicate rental and Service Level status.
<b>Options:</b>	IR Patient Remote Control, IR Hostess Programmer, Bulk Programmer, Computer Module.
<b>On-Screen Display Capability:</b>	11 lines, 24 characters per line.
<b>Computer Interface:</b>	Compatible with interactive systems manufactured by; Allen Technologies Inc. ATNET P2 System - 650-777-0942 TeleHealth Services TigrNet System - 919-772-8604 TVR Communications Rover System - 718-335-3031
<b>Regulatory Compliance:</b>	Approved for hospital use.
<b>Warranty:</b>	See Dealer for details

*Manufactured Exclusively For:*

**Sumitomo Canada Limited**

*The K10-200 is manufactured by Korea Electronics Company, one of Korea's leading general electronic component manufacturers. KEC, established in 1969, now consists of a nine-company group with over 2,000 employees including 500 engineers and 100 researchers.*

AVAILABLE FROM:



# COLOR TELEVISION

## OPERATING INSTRUCTIONS

MODEL : L-10 ELF

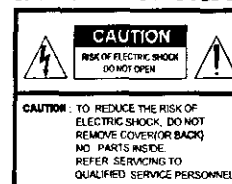
BEFORE USING TELEVISION RECEIVER,  
READ AND OBSERVE ALL OF THIS OWNER'S MANUAL

Part No. 11906674

### INSTALLATION PRECAUTIONS . . .

1. Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could avoid the user's authority to operate the equipment.

#### 2. GRAPHICAL SYMBOLS EXPLANATION



This lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the appliance.

3. Use only DC18 ~ 32V, AC 25 ~ 35V source from a CSA Certified / UL Approved Class 2 power Supply suitable for use in Healthcare Facilities.

#### 4. INSTALLATION AND CONNECTION

Installation of the television receiver must be performed by the qualified service personnel only. Mount the television receiver to the support arm and connect the external coaxial cable to the coaxial cable of support arm for power source and TV signal.

#### 5. CLEANING

Clean the exterior of your equipment by removing dust with lint-free cloth. For the further cleaning, use soft cloth or paper towel dampened with water.

**CAUTION:** To avoid damage to the surface of the equipment, do not use abrasive or chemical cleaning agents.

### About this user's guide . . .

This user's Guide identifies the features of the L-10 ELF television and describes how to program the television using the Infrared hand unit. **"THESE INSTRUCTIONS ARE FOR L-10 ELF TV's THAT ARE NOT COMPUTER CONTROLLED"**

Programming is the process of selecting from among the many features of the L-10 ELF. It is also the process of adding and removing channels from the six service levels this TV provides.

Please read through this guide carefully, with a L-10 ELF TV in front of you, as you begin the process of learning how to program these televisions. Also keep the guide handy, so you can refer to it, for future programming changes.

The information in this guide describes each of the main SETUP MENU items: Rental (service level), Picture, Sound, Channel Set up, Features, Blocking and Language. It also describes how you can access and change the features within these menu options. To get ready, turn the TV on and press the SETUP button on the infrared hand unit and the SETUP MENU will appear on the TV.

Before installing TV's in the hospital, please obtain and read the instructions for attaching the TV to the support arm. These instructions are not part of this guide and should be obtained from the TV rental service provider.

## About this user's guide . . .

### THE CONTENTS

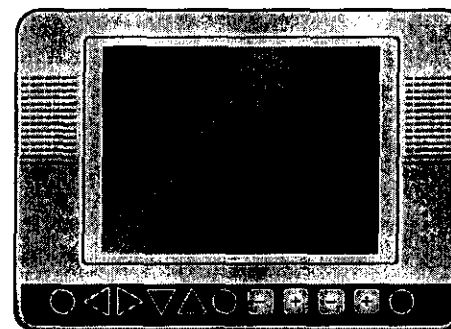
Installation Precautions .....	2
About the L-10 ELF television .....	3
About service levels .....	6
About the infrared hand unit .....	8
About programming the L-10 ELF .....	10
How do I select a TV service level? .....	11
How do I adjust the quality of the TV picture? .....	15
How do I adjust the quality of the TV sound? .....	16
How do I change the setup of the channels? .....	18
How do I change the features of the TV? .....	21
How do I operate the V-chip? .....	24
How do I change the language in menu and programming options? .....	34
What if .....	35
Safeguards .....	36

## About the L-10 ELF television . . .

The L-10 ELF is a 10 inch, 125 channel, television, designed specifically for use in hospitals. It provides for six service levels: Free, Locked, Basic Unpaid, Basic Paid, Premium 1, Premium 2.

One coaxial cable provides the TV with low voltage AC or DC power and a TV signal. The signal source for the television is cable (CATV) or a TV antenna. In most hospitals, the source of the signal is cable. Programming screens and rental instructions come in three languages: Spanish, French and English.

### L-10 ELF Television



## About the L-10 ELF television . . .

In the easy to clean, membrane control panel, on the lower front of the TV, there are 11 large, easy to read, buttons. Either the patient or the TV representative can use the 5 buttons on the right side, to turn the TV on and off, change channels and raise or lower the sound. These functions can be controlled as well, with the infrared hand unit. The far right side of this panel responds to the infrared beam produced when you press the buttons on the hand held infrared unit.

On the left side of the membrane control panel, the Menu button and the Enter button makes it easy for patients to rent the television or "self rent", as it is called, when the TV representative is not present. The other 4 buttons, on the left side of the panel, become active when the L-10 TV is operated as part of a computerized system. Patients can then use these buttons to select from the menu options that appear on the TV.

The infrared hand unit lets the TV representative manage the special features of the L-10, such as levels of service, channel groupings and selections and as well change the quality of the picture, features and choice of language.

### **EARPHONE Jack**

The EARPHONE Jack is in the lower left corner. Insert an ear piece or head set and the sound comes only from this device.

### **Closed Captioning :**

When available, captions (CC) may be displayed on a selected channel by pressing the ENTER/CC button on the front panel of the television or on the remote control unit.

By continuing to press the ENTER/CC button four different selections can be made.

Caption 1, Caption 2, Text 1, Text 2.

Once you choose a Caption leave it in that selection unless you know there is something available in one of the other options.

Once selection is made it is remembered until you change it.

To turn off captions continue pressing the ENTER/CC button until the OFF position is reached.

## About service levels . . .

TV's are generally programmed for the required service levels before they are installed in a hospital. When you replace TV's or when channel numbers change, reprogramming is needed.

The most common service levels used are levels 1 to 4. Premium 1 and/or Premium 2 Service Levels are used when "pay per view" movies or events or when movie channels are offered at an extra charge.

### **1. Free Service Level**

The Free Service Level lets patients watch hospital education and information channels, without renting the television. The channels over which education and information are broadcast must be programmed into this level of service. Entertainment channels are not generally included and therefore are not programmed into this Free Service Level.

### **2. Locked Service Level**

The Locked Service Level does not let the patient, "self rent" and when a patient tries to do so, this message appears.

The free channels, over which education and information are broadcast, must be programmed into this service level so that the non paying viewer can watch the free education and information channels.

Locked service makes it possible to cut off rental, to those who continue to "self rent" and then refuse to pay for this rental service.

For Additional  
Service Please  
Contact TV  
Representative

## About service levels . . .

### 3. Basic Unpaid Service Level

When a patient "self rents", the TV automatically goes to the Basic Unpaid Service Level. All the entertainment channels available in the hospital, as well as the education and information channels must be programmed into this service level.

This confirms that the TV is rented but the rental fee is not paid.

### 4. Basic Paid Service Level

When you collect the rental fee and press the PAID button on the infrared hand unit, the TV automatically changes to the Basic Paid Service Level. The Basic Paid and the Basic Unpaid Service Levels should be assigned the same group of channels (channelmap).

This confirms that the TV is rented and the rental fee is paid.

### 5. Premium 1 Service Level

This level of service is available only when special services such as "pay per view" movies or events or movie channels are offered at an additional cost to the basic service level. The Premium 1 Service Level is usually made available to patients who have rented and paid for the basic service level.

### 6. Premium 2 Service Level

This service level, when provided, is in addition to Premium 1. Premium 2 Service Level must include its own selected channel(s) as well as the channel(s) programmed in Premium 1 Service Level. The Premium 2 Service Level is usually only made available to patients who have the Basic Paid Service Level and the Premium 1 Service Level.

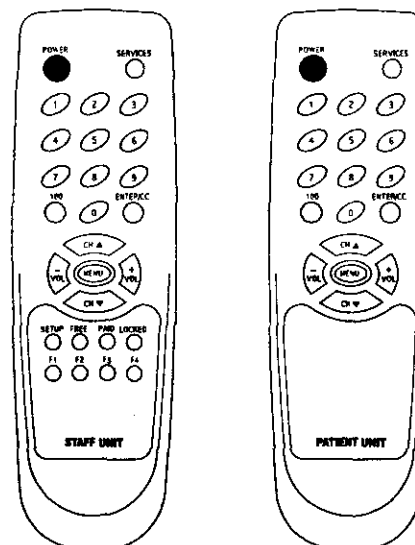
**IN NON-RENTAL ACCOUNTS, TV MUST BE PROGRAMMED IN THE BASIC UNPAID OR BASIC PAID SERVICE LEVEL. THIS WILL DISABLE THE SELF RENT FEATURE.**

## About the infrared (IR) hand unit . . .

The infrared unit is hand held and produces an infrared beam that you cannot see. This beam travels in a straight line, much like the light beam from a flashlight. The infrared hand unit operates with two "AA" cell batteries.

In some hospitals, the patient may have the option of using an infrared hand unit that has fewer buttons than the unit used by the TV representative. With their infrared hand unit, patients can self rent, change channels and volume levels but they are not able to select or change the special features of the L-10. The TV representative can perform all the patients' functions and can also select and change the special features that the L-10 ELF TV offers.

### Infrared Hand Held Unit



For the TV representative

For the patient

## About the infrared (IR) hand unit . . .

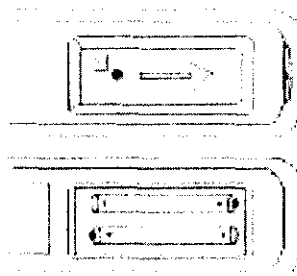
### How to use the infrared hand unit :

- Hold the IR unit flat in the palm of your hand, with the buttons up.
- Stand about the length of your arm, back from the television.
- Point the infrared hand unit directly at the lower, right corner of the front control panel on the television. This is important. A misdirected infrared beam can change programming on a nearby television.
- Make the selection on the infrared hand unit by pressing and releasing the button(s) quickly.
- The FREE, PAID, LOCKED buttons work even when the TV is turned off.

### How to install and change batteries in the infrared hand unit :

- Press down on the ridged area of the battery cover and slide it off.
- Install 2 "AA" batteries in the battery holder. Make sure to match the + end of each battery to the + end in the battery holder.
- Replace the battery cover and turn the remote over.

Infrared Hand Unit (back view)  
Installing New Batteries



## About programming the L-10 ELF . . .

Programming is the process of selecting options from the special features of the L-10 TV. Programming includes selecting entertainment channels, as well as educational and information channels and assigning these to different service levels. TV's are programmed before they are installed in a hospital; however, when TV's are replaced or the channel numbers change, reprogramming is needed. Make these programming changes with the infrared hand unit .

### How do I program the L-10 ELF?

1. Turn the TV on.

To do this, point the infrared (IR) hand unit at the lower right corner of the television and press the POWER button. A small light emitting diode beside the POWER button on the TV "lights up" when the TV is on. You can also turn the TV on by pressing the POWER button on the TV control panel.

2. Press SETUP. The main SETUP MENU appears on the TV screen.
3. Press the CHANNEL (CH▲▼) button on the infrared hand unit until your menu selection is highlighted.
4. Press the VOLUME (VOL±) button to accept the selection or to change the option.

When you have completed a selection, press SETUP on the infrared hand unit to return to the previous menu selection. Continue to Press SETUP until the TV program appears.

#### SETUP MENU

Rental: Free  
Picture  
Sound  
Channel Setup  
Features  
Blocking  
Language: English  
▲▼ TO Select  
+ - To Change

Main SETUP MENU

## H How do I select a TV service level?

1. Press **SETUP** on the infrared hand unit.
2. Press **CH▲▼** to select Rental: service level
3. Press **VOL±** to change the Rental: service level.

- **Basic Unpaid** - The TV automatically goes to this service level when the TV is "self rented".

When the rental fee is paid, simply press the **PAID** button on the infrared hand unit.

### SETUP MENU

Rental: Free  
Picture  
Sound  
Channel Setup  
Features  
Blocking  
Language: English

▲▼ TO Select  
+ - To Change

### Main SETUP MENU

- **Basic Paid** - Choose **VOL±** Basic Paid or simply press the **PAID** button on the infrared hand unit when the patient pays the rental fee for the basic rental service level.

Confirms that the rental fee is paid and the Basic Paid Service Level is activated.

- **Premium 1** - Choose **VOL±** Premium 1, to rent this service level to patients also renting the Basic Paid Service Level. The channels programmed in the Premium 1 Service Level would normally include the same channels (channel map) that is programmed in the Basic Paid Service Level.

- **Premium 2** - Choose **VOL±** Premium 2 to rent this service level. The channels programmed in the Premium 2 Service Level would normally include the same channels (channel map) that are programmed in the Premium 1 Service Level.

## H How do I select a TV service level?

- **Locked** - Choose **VOL±** Locked Service Level or simply press the **LOCKED** button on the infrared hand unit to block the "self rent" feature. If a viewer tries to "self rent", this message appears on the TV.

**For Additional Service  
Please Contact TV  
Representative.**

- **Free** - Choose **VOL±** Free or press the **FREE** button on the infrared hand unit to make the channels programmed in this service level, available to the patient, free of charge.

## How do I select a TV service level?

"Self rent" is a valuable feature of the L-10 ELF television. Patients have the option of enjoying entertainment programming when a TV representative is not available to carry out the rental transaction.

The "self rent" feature is available when Free is the selected service level and channels are assigned to the Rental: Basic Unpaid option.

### How does a patient "self rent"?

To "self rent", patients press the MENU button on the control panel of the TV or press the MENU button on the infrared hand unit. This message appears on the TV screen:

When the patient presses ENTER, either on the infrared hand unit or on the control panel of the L-10 TV, the service level automatically changes from Rental: Free to Rental: Basic Unpaid.

**Confirm Rental**  
**Press enter to**  
**confirm**  
**your rental.**  
**Press any other**  
**button**  
**to cancel.**

### From self rent to Rental: Basic Paid

When you collect the rental fee, press Paid on the infrared hand unit or

♦ Press SETUP

♦ Select CH▲▼ Rental: service levels

♦ Press VOL± to change the level of service to Basic Paid.

## How do I select a TV service level?

### When a patient chooses to rent both the Basic and a Premium Service Level:

- ♦ Press SETUP.
- ♦ Select Channel Setup.
- ♦ Select Assign channel maps.
- ♦ Identify the number of the map assigned to the Basic Paid Service Level.
- ♦ Identify which channels are included in this map.
- ♦ Select the channel map for the selected Premium option.
- ♦ Add the channels from the Basic Paid Service Level to the selected Premium Service Level, channel map, using the Autoprogram or the Add/Delete function.
- ♦ Select the Premium service from the service level selections.
- ♦ Press SETUP to return to TV programming.
- ♦ Channel CH▲▼ to be sure that the channels from the Basic Paid Service Level and selected Premium Service Level are available to the viewer.

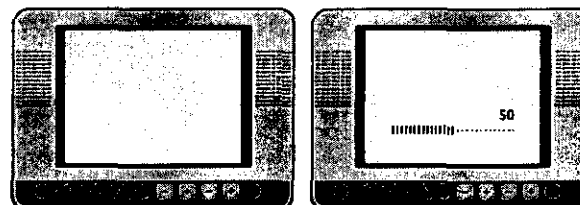
- **Contrast** - Select CH▲▼ Contrast to adjust the overall contrast of the picture. Hold down the VOL+ button to increase or the VOL- button to reduce contrast.
- **Brightness** - Select CH▲▼ Brightness to adjust the brightness of the picture. Hold down VOL+ to increase or the VOL- to reduce brightness.
- **Sharpness** - Select CH▲▼ Sharpness to adjust the overall sharpness of the picture. Hold down VOL+ to increase or VOL- to decrease the sharpness.
- **Color** - Select CH▲▼ Color to adjust the amount of color in the picture. Hold down VOL+ to increase or VOL- to reduce the color.
- **Tint** - Select CH▲▼ Tint to adjust the color of the flesh tones. Hold down VOL+ button to increase or VOL- to reduce skin color.

## How do I adjust the quality of the TV sound?

### To adjust the quality of the TV sound ...

1. Press SETUP on the infrared hand unit.
2. Press CH▲▼ to select Sound.
3. Press VOL ± to accept this selection.
4. Press CH▲▼ to select a Sound option.
5. Press VOL ± to adjust the selected Sound option.

To adjust any of the Sound options, hold down VOL+ to increase and VOL- to decrease the adjustment. The sliding color bar that appears on the screen increases and decreases as adjustments are made. So does the number (from 0 to 100) that appears above the bar. Generally, the standard point on the bar or about 50 is a good level.





## How do I adjust the quality of the TV sound?

- **Bass** - Select CH▲▼ Bass to adjust the amount of bass in the sound. Hold down VOL+ to increase or the VOL- button to reduce bass.
- **Treble** - Select CH▲▼ Treble to adjust the amount of treble in the sound. Hold down VOL+ to increase or the VOL- to reduce treble.
- **Balance** - Select CH▲▼ Balance to adjust the balance in the sound. Hold down VOL+ to increase right volume, and hold down VOL- to increase left volume.
- **Mts** - Select CH▲▼ Mts to adjust the mts of the sound. Hold down VOL+, the selection will change in the order Stereo - Sap - Mono.

### NOTES:

- Reception of Stereo or SAP broadcast information is of course dependent on a television station actually broadcasting such material. Not all stations do, and some stations only broadcast Stereo/SAP material during part of the day.
- If the L-10 ELF is set to STEREO and no stereo signal is being broadcast, a MONO signal will automatically be received.

## How do I change the set up of the channels?

1. Press SETUP on the infrared hand unit.
2. Select CH▲▼ Channel Setup.
3. Press VOL ± to accept this selection.
4. Press CH▲▼ to select a Channel Setup option.

- **Antenna** : CATV/TV - Select CH▲▼ Antenna: to change the source of the TV signal. Choose VOL ± CATV (cable TV), when cable is the signal source. When an antenna is the signal source, choose TV. In almost all hospitals, cable is the source of the signal.

### CATV Install

The chart below is typical of many cable channel allocations.

A	B	C	D	E	F	G	H	I	J	K	L	M	N
01	95	96	97	98	99	14	15	16	17	18	19	20	21
02	90	91	92	93	94	10	11	12	13	14	15	16	17
03	85	86	87	88	89	05	06	07	08	09	10	11	12
04	80	81	82	83	84	00	01	02	03	04	05	06	07
05	75	76	77	78	79	95	96	97	98	99	04	05	06
06	70	71	72	73	74	90	91	92	93	94	00	01	02
07	65	66	67	68	69	85	86	87	88	89	95	96	97
08	60	61	62	63	64	80	81	82	83	84	90	91	92
09	55	56	57	58	59	75	76	77	78	79	85	86	87
10	50	51	52	53	54	70	71	72	73	74	75	76	77
11	45	46	47	48	49	65	66	67	68	69	70	71	72
12	40	41	42	43	44	60	61	62	63	64	65	66	67
13	35	36	37	38	39	55	56	57	58	59	60	61	62
14	30	31	32	33	34	50	51	52	53	54	55	56	57
15	25	26	27	28	29	45	46	47	48	49	50	51	52
16	20	21	22	23	24	40	41	42	43	44	45	46	47
17	15	16	17	18	19	35	36	37	38	39	40	41	42
18	10	11	12	13	14	30	31	32	33	34	35	36	37
19	05	06	07	08	09	25	26	27	28	29	30	31	32
20	00	01	02	03	04	20	21	22	23	24	25	26	27
21	95	96	97	98	99	15	16	17	18	19	20	21	22
22	90	91	92	93	94	10	11	12	13	14	15	16	17
23	85	86	87	88	89	05	06	07	08	09	10	11	12
24	80	81	82	83	84	00	01	02	03	04	05	06	07
25	75	76	77	78	79	95	96	97	98	99	04	05	06
26	70	71	72	73	74	90	91	92	93	94	00	01	02
27	65	66	67	68	69	85	86	87	88	89	95	96	97
28	60	61	62	63	64	80	81	82	83	84	90	91	92
29	55	56	57	58	59	75	76	77	78	79	85	86	87
30	50	51	52	53	54	70	71	72	73	74	75	76	77
31	45	46	47	48	49	65	66	67	68	69	70	71	72
32	40	41	42	43	44	60	61	62	63	64	65	66	67
33	35	36	37	38	39	55	56	57	58	59	60	61	62
34	30	31	32	33	34	50	51	52	53	54	55	56	57
35	25	26	27	28	29	45	46	47	48	49	50	51	52
36	20	21	22	23	24	40	41	42	43	44	45	46	47
37	15	16	17	18	19	35	36	37	38	39	40	41	42
38	10	11	12	13	14	30	31	32	33	34	35	36	37
39	05	06	07	08	09	25	26	27	28	29	30	31	32
40	00	01	02	03	04	20	21	22	23	24	25	26	27
41	95	96	97	98	99	15	16	17	18	19	20	21	22
42	90	91	92	93	94	10	11	12	13	14	15	16	17
43	85	86	87	88	89	05	06	07	08	09	10	11	12
44	80	81	82	83	84	00	01	02	03	04	05	06	07
45	75	76	77	78	79	95	96	97	98	99	04	05	06
46	70	71	72	73	74	90	91	92	93	94	00	01	02
47	65	66	67	68	69	85	86	87	88	89	95	96	97
48	60	61	62	63	64	80	81	82	83	84	90	91	92
49	55	56	57	58	59	75	76	77	78	79	85	86	87
50	50	51	52	53	54	70	71	72	73	74	75	76	77
51	45	46	47	48	49	65	66	67	68	69	70	71	72
52	40	41	42	43	44	60	61	62	63	64	65	66	67
53	35	36	37	38	39	55	56	57	58	59	60	61	62
54	30	31	32	33	34	50	51	52	53	54	55	56	57
55	25	26	27	28	29	45	46	47	48	49	50	51	52
56	20	21	22	23	24	40	41	42	43	44	45	46	47
57	15	16	17	18	19	35	36	37	38	39	40	41	42
58	10	11	12	13	14	30	31	32	33	34	35	36	37
59	05	06	07	08	09	25	26	27	28	29	30	31	32
60	00	01	02	03	04	20	21	22	23	24	25	26	27
61	95	96	97	98	99	15	16	17	18	19	20	21	22
62	90	91	92	93	94	10	11	12	13	14	15	16	17
63	85	86	87	88	89	05	06	07	08	09	10	11	12
64	80	81	82	83	84	00	01	02	03	04	05	06	07
65	75	76	77	78	79	95	96	97	98	99	04	05	06
66	70	71	72	73	74	90	91	92	93	94	00	01	02
67	65	66	67	68	69	85	86	87	88	89	95	96	97
68	60	61	62	63	64	80	81	82	83	84	90	91	92
69	55	56	57	58	59	75	76	77	78	79	85	86	87
70	50	51	52	53	54	70	71	72	73	74	75	76	77
71	45	46	47	48	49	65	66	67	68	69	70	71	72
72	40	41	42	43	44	60	61	62	63	64	65	66	67
73	35	36	37	38	39	55	56	57	58	59	60	61	62
74	30	31	32	33	34	50	51	52	53	54	55	56	57
75	25	26	27	28	29	45	46	47	48	49	50	51	52
76	20	21	22	23	24	40	41	42	43	44	45	46	47
77	15	16	17	18	19	35	36	37	38	39	40	41	42
78	10	11	12	13	14	30	31	32	33	34	35	36	37
79	05	06	07	08	09	25	26	27	28	29	30	31	32
80	00	01	02	03	04	20	21	22	23	24	25	26	27
81	95	96	97	98	99	15	16	17	18	19	20	21	22
82	90	91	92	93	94	10	11	12	13	14	15	16	17
83	85	86	87	88	89	05	06	07	08	09	10	11	12
84	80	81	82	83	84	00	01	02	03	04	05	06	07
85	75	76	77	78	79	95	96	97	98	99	04	05	06
86	70	71	72	73	74	90	91	92	93	94	00	01	02
87	65	66	67	68	69	85	86	87	88	89	95	96	97
88	60	61	62	63	64	80	81	82	83	84	90	91	92
89	55	56	57	58	59	75	76	77	78	79	85	86	87
90	50	51	52	53	54	70	71	72	73	74	75	76	77
91	45	46	47	48	49	65	66	67	68	69	70	71	72
92	40	41	42	43	44	60	61	62	63	64	65	66	67
93	35	36	37	38	39	55	56	57	58	59	60	61	62
94	30	31	32	33	34	50	51	52	53	54	55	56	57
95	25	26	27	28	29	45	46	47	48	49	50	51	52
96	20	21	22	23	24	40	41	42	43	44	45	46	47
97	15	16	17	18	19	35	36	37	38	39	40	41	42
98	10	11	12	13	14	30	31	32	33	34	35	36	37
99	05	06	07	08	09	25	26	27	28	29	30	31	32
100	00	01	02	03	04	20	21	22	23	24	25	26	27

### NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV system installer's attention to article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

- **Assign channel maps** - A channel map is the method of organizing channels in different service levels. When a map does not contain any channels, the word "empty" appears beside it. Before you identify which channel map should go with which service level, you must know which channels, the map contains. It is easiest to keep a written list of the map number and the channels assigned to it.

### To identify which channels are included in a channel map ...

- Select CH▲▼ ADD/Delete channels.
- Press VOL ± to accept the selection.
- Select CH▲▼ the desired map.
- Press VOL ± to accept the selection. Add/Delete channels for the selected Map #.
- Press CH▲▼ to change channels. When + appears before the channel number, this channel is included in the selected Map. When - appears before the channel number, this channel is not included.